

4 June 1986

*78/OIT-MF  
D/ETT-93*

MEMORANDUM FOR: Director of Information Technology

FROM:

Chief, Network Systems Engineering Group

STAT

SUBJECT: Acquisition of Software for the DI

NSEG has reviewed the three requests from the DI for software purchases. The following information is provided for the mid-June OIT Monthly Budget Review.

V/SPELL:

V/SPELL, VM based spelling checker, is a product of VM Systems Group (VMSG) of Arlington, Virginia. VMSG is a small company with two principals who are well known in the VM community. We have not had any business relationships with VMSG.

V/SPELL has been tested and evaluated in the OIT environment. The response was favorable. V/SPELL works with Xedit on both Delta Data's and IBM 3270's. OIT's strategy should include replacing the current "home grown" spelling checker with V/SPELL. Some work is required to integrate V/SPELL with AIM. This effort is estimated to take 4-6 person months and needs to be scheduled through the AIM OCB.

Perpetual licenses for 15 CPUs can be obtained for approximately \$38,715.00. The DI (ASG) has indicated, in AIM correspondence, a willingness to pay for the Northside Center licenses, if OIT pays for the other computer centers (Ruffing, CAMS, DESIST, and Special) licenses. This breaks out to be approximately \$13,000 for the DI and \$26,000 for OIT. NSEG has funds to cover \$10,000 of the \$26,000.

LATTICE C

Lattice C is an implementation of the C language used extensively in the DEC (Digital Equipment Corp.) world. The Lattice implementation supports a common, widely accepted version of C for a variety of systems, including IBM PC's and mainframes. The SAS Institute has obtained the rights to market the Lattice C for IBM mainframes. SAS is also the developer of our principal statistical package.

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We now have several versions of "C" in-house. We acquired several licenses for the Whitesmith version several years ago. It turned out to be woefully inadequate. CAMS needed something better to drive the IDM so they obtained a copy of the Bell Labs version. While better than Whitesmith, the Bell C is very difficult to maintain (Britton-Lee does the maintenance for CAMS). CAMS was also looking at a version from Waterloo in anticipation that Britton-Lee would switch. CAMS has recently expressed an interest in Lattice C. Our primary interest in C is the ability to import applications written for other systems. The Lattice implementation is a de facto standard. This makes it very attractive to the Agency. When the decision by SAS to rewrite their software using Lattice C is factored in, the Lattice version becomes a clear front runner. We should be offering a C language processor as a standard component of our interactive services, just as we offer PL/I and FORTRAN.

This is a good opportunity to bring Lattice C in for evaluation. If it meets our expectations, OIT should plan to license it for all of our general purpose VM Systems. Lattice C costs \$3,200 for the first year and \$2,400 thereafter. The DI (ASG) has indicated, in AIM correspondence, a willingness to help finance the procurement of one license which could be used for the evaluation. (CAMS may also wish to initiate an early procurement which they would fund).

#### SCRIPT Mathematical Formatter

The major issue with implementing the IBM Mathematical Formatter concerns the IBM 3812 printer that is required for printed output. These are three issues with the IBM 3812; (1) security classifications on output, (2) control and accountability of output, and (3) suppression of the ability to link multi-minidisks for graphic printing.

IBM has agreed, per NSEG's request, to provide "exits" in their software so we can provide the necessary code to solve the three issues defined above. IBM is scheduled to deliver their software in July 1986. It will take NSEG approximately 2 months to develop, test and implement the necessary software. If IBM delivers their software in July as scheduled, NSEG will have the software enhancements implemented by October 1986. This phase of the effort must be completed prior to bringing in the Mathematical Formatter.

There are two possible sources from which to procure software to generate mathematical formulas. One is the IBM version that is an extension of Script/VS (Script Mathematical Formatter). This software is available. The other is from WATSOFT, the vendor of OIT's standard text formatter (Waterloo Script). This software is scheduled to be available in late 1986. (The month is not known at this time).

SUBJECT: Acquisition of Software for the DI

Script/VS and Waterloo Script are similar, but sufficiently different that sophisticated script files can require a substantial conversion effort to move from one formatter to the other. OIT had selected Script/VS as a standard several years ago, and then had to change to Waterloo Script for several reasons.

OIT wants to avoid the creation of two script cultures within the Agency. Therefore, I want to defer the decision as to which mathematical formatter we procure until we receive the IBM 3812 Software from IBM and attempt to get a firm delivery date from WATSOFT. *ek*

Our preference and strategy is to procure the WATSOFT Software. However, if the WATSOFT delivery date causes an unreasonable delay in providing support to the DI, then we should obtain a license from IBM at the monthly fee of \$300. Consequently, the DI should be advised that we view the use of Script/VS to be a short-term expediency until we can provide support for the mathematical formatter in Waterloo Script, the OIT standard. *ok*

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cc: DD/OIT-M